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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,450	08/20/2003	Katrina Schmidt	12166	7041

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EXAMINER	
COONEY, JOHN M	
ART UNIT	**PAPER NUMBER**
1711	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/644,450	SCHMIDT ET AL.	
	Examiner	Art Unit	
	John m. Cooney	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *0803*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerber et al.(5,594,040) in view of Lorenz et al.(6,734,471).

Gerber et al. disclose preparations of polyurethane foams prepared from polyols, isocyanates, water as a blowing agent, and additives, such as, chain extenders and crosslinking agents, at low NCO index values and under conditions meeting the spraying system conditions of the method claims (see the entire document).

Gerber et al. differs from the claims in that they do not recite particulars of their proposed crosslinking and chain extending additives. However, Lorenz et al. discloses chain extenders, crosslinking agents, and blends thereof, used in cellular polyurethane synthesis operations which meet requirements of the tetrafunctional polyol component and the curing component of applicants' claims (see column 5 line 43 – column 6 line 29, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the tetrols and diamino compounds recited by Lorenz et al. for the purpose of imparting their crosslinking, chain extending, and, accordingly, resin curing effect in the synthesis operations of Gerber et al. in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Gerber et al. further differs from applicants' claims in that preference for articles of measurably higher density is desired. However, Gerber et al. acknowledges motivation to vary the amount of water for the purpose of controlling foaming of the formed polyurethane foam. It is seen that this teaching establishes this element to be a result effective variable, and it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller,* 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar properties. *Titanium Metals v Banner* 227 USPQ 773. **(see also MPEP 2144.05 I)** Accordingly, it would have been obvious for one having ordinary skill in the art to have varied the foaming effective amounts of water to greater inclusion for the purpose of increasing the foaming effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Lacarte et al.(6,534,556).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Lacarte et al. disclose polyurethane foam preparations derived from mixing and reacting polyols including at least one additional polyols reading on the first terafunctional polyol and second polyols claimed and a blowing catalyst reading on the curing component of applicants' claims, isocyanates, and blowing agents(see the entire document). It is held that the density values of applicants' claims are inherent to the teachings of Lacarte et al. owing to the similarities of materials employed in the instant preparations. Additionally, as Lacarte et al. is directed towards volumetric ratio values reading on values even lower than those claimed, it is seen that Lacarte et al. is directed towards preparations of combinations of materials at NCO Index values which inherently meet those of applicants' claims, and the recitation of the NCO Index value of applicants' claims are not distinguished from those of Lacarte et al. with out the accompanying recitation of volumetric ratio values set forth beginning at applicants' claim 39.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,534,556. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 6,534,556 disclose polyurethane foam preparations derived from mixing and reacting polyols including at least one additional polyols including the first tetrafunctional polyol and second polyols claimed and a blowing catalyst which include the curing component of applicants' claims, isocyanates, and blowing agents which are combined in such a manner that differences in contents and amounts and the associated properties thereof would have been obvious to one having ordinary skill in the art with the expectation of success in the absence of a showing of new or unexpected results.

Claims 1-38 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/936,299. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 10/936,299 disclose polyurethane foam preparations derived from mixing and reacting polyols including at least one additional polyols including the first tetrafunctional polyol and second polyols claimed and a blowing catalyst which include the curing component of applicants' claims, isocyanates, and blowing agents which are combined in such a manner that differences in contents and amounts and the associated properties thereof would have been obvious to one having ordinary skill in the art with the expectation of success in the absence of a showing of new or unexpected results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lohmar et al. is cited for its recitation and the value of low NCO Index values in the art. Randall et al. is cited for its recitation of more specifics on the Rimstar 40/20 mixing/injector system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN M. COONEY, JR.
PRIMARY EXAMINER
Group 1700